1. A digital frequency jittering circuit for varying the switching frequency of a power supply, comprising:

an oscillator for generating a signal having a switching frequency, the oscillator having a control input for varying the switching frequency;

a digital to analog converter coupled to the control input for varying the switching frequency; and

a counter coupled to the output of the oscillator and to the digital to analog converter, the counter causing the digital to analog converter to adjust the control input and to vary the switching frequency.

2. The circuit of claim 1, wherein the oscillator further comprises a primary current source coupled to the oscillator control input.

3. The circuit of claim 2, further comprising a differential switch, including:

first and second transistors coupled to the primary current source;

a third transistor coupled to the first transistor; and

a fourth transistor coupled to the second transistor at a junction.

4. The circuit of claim 3, further comprising a capacitor coupled to the junction.

5. The circuit of claim 3, further comprising one or more comparators coupled to the junction.

6. The circuit of claim 2, wherein the digital to analog converter has one or more secondary current sources.

7. The circuit of claim 6, further comprising a transistor coupled between each secondary current source and the counter.

8. The circuit of claim 6, wherein the primary current source generates a current I and each of the secondary current sources generates a current lower than I.

9. The circuit of claim 8, wherein the secondary current sources generate binary weighted currents.

10. The circuit of claim 8, wherein the largest secondary current source generates a current which is less than about 0.1 of I.

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11. A method for generating a switching frequency in a power conversion system, comprising:

generating a primary current;

cycling one or more secondary current sources to generate a secondary current which varies over time; and

supplying the primary and secondary currents to a control input of an oscillator for generating a switching frequency which is varied over time.

12. The method of claim 11 further comprising the step of clocking a counter with the output of the oscillator.

13. The method of claim 11 wherein the primary current is generated by a current source.

14. The method of claim 11 wherein the primary current is I and each of the secondary current sources generates a supplemental current lower than I, and further comprising passing the supplemental current to the oscillator control input.

15. The method of claim 14 further comprising binary-weighting the supplemental current.

16. The method of claim 14 wherein the largest supplemental current is less than approximately 0.1 of I.

17. A method for generating a switching frequency in a power conversion system, comprising:

generating a primary voltage;

cycling one or more secondary voltage sources to generate a secondary voltage which varies over time; and

supplying the primary and secondary voltages to a control input of a voltage-controlled oscillator for generating a switching frequency which is varied over time.

18. The method of claim 17 further comprising clocking a counter with the output of the oscillator.

19. The method of claim 17 wherein the primary voltage is V and each of the secondary voltage sources generates a supplemental voltage lower than V, further comprising passing the supplemental voltage to the voltage-controlled oscillator.

20. The method of claim 19, wherein the supplemental voltage is binary-weighted.

21. A frequency jittering circuit for varying a power supply switching frequency, comprising:

an oscillator for generating a signal having a switching frequency, the oscillator having a control input for varying the switching frequency; and

means coupled to the control input for varying the switching frequency.

22. The circuit of claim 21 wherein the means for varying the frequency further comprises:

one or more current sources coupled to the control input;

~~and~~

a counter coupled to the output of the oscillator and to the one or more current sources.

23. The circuit of claim 22 wherein the oscillator further comprises:

a primary current source coupled to the control input; and

a differential switch coupled to the primary current source.

24. The circuit of claim 23 wherein the differential switch further comprises:

first and second transistors coupled to the primary current source;

a third transistor coupled to the first transistor; and

a fourth transistor coupled to the second transistor at a junction.

25. The circuit of claim 23 further comprising a capacitor and a comparator coupled to the junction.

26. The circuit of claim 22 further comprising a transistor coupled to each current source and to the counter.

27. The circuit of claim 22 wherein the primary current source generates a current I and each of the current sources generates a current lower than I.

28. The circuit of claim 22 wherein the primary current source generates a current I and each of the current sources generates a second current lower than the current I, further comprising a transistor coupled to each current source connected to the counter.

29. The circuit of claim 21 wherein the means for varying the frequency further comprises:

one or more voltage sources coupled to the control input; and

a counter coupled to the output of the oscillator and to the one or more voltage sources.

30. The circuit of claim 22 wherein the oscillator further comprises:

a primary voltage source coupled to the control input; and

a differential switch coupled to the primary voltage source.

31. The circuit of claim 21 wherein the means for varying the frequency further comprises:

a capacitor; and

a current source adapted to charge and discharge the capacitor.

32. The circuit of claim 31 further comprising:

one or more comparators coupled to the capacitor; and

the means for alternatingly charging and discharging the capacitor.

33. A power supply having a transformer coupled to an input voltage, the transformer having a primary winding, the power supply comprising:

an oscillator for generating a signal having a frequency, the oscillator having a control input for varying the frequency of the signal, the oscillator including:

a primary current source coupled to the control input;

a differential switch coupled to the primary current source;

a capacitor coupled to the differential switch; and

a comparator coupled to the differential switch;

a digital to analog converter coupled to the control input, the analog to digital converter having one or more current

sources, wherein the primary current source generates a current I and each of the current sources generates a current lower than I;

a counter coupled to the output of the oscillator and to the current sources of the digital to analog converter; and

a power transistor coupled to the oscillator and to one terminal of the primary winding, the power transistor modulating its output in providing a regulated power supply output.

34. A power supply having a transformer coupled to an input voltage, the transformer having a primary winding, the power supply comprising:

an oscillator for generating a signal having a frequency, the oscillator having a control input for varying the frequency of the signal, the oscillator including:

a primary current source coupled to the control input;

a differential switch coupled to the primary current source;

a capacitor coupled to the differential switch; and

a comparator coupled to the differential switch;

a circuit for varying the frequency, the circuit coupled to the control input, including:

a capacitor;

a current source adapted to charge and discharge the capacitor;

one or more comparators coupled to the capacitor to the current source for alternatingly charging and discharging the capacitor; and

a power transistor coupled to the oscillator and to one terminal of the primary winding, the power transistor modulating its output in providing a regulated power supply output.